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EXAMINER	
BRINEY III, WALTER F	

ART UNIT	PAPER NUMBER
2644	

DATE MAILED: 06/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/800,512	ZIELKE ET AL.	
	Examiner	Art Unit	
	Walter F. Briney III	2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-64* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,7-10,15-17,22-26,28-38,42-44,46-56 and 58-64* is/are rejected.

7)☒ Claim(s) *3-6,11-14,18-21,27,39-41,45 and 57* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. **Claims 1, 2, 7-10, 22, 23, 28-31, 42, 46-48, 51-54 and 58-61 are rejected under 35 U.S.C. 102(b) as being anticipated by Rasmussen (US Patent 4,040,699).**

Claim 1 is limited to *a termination block*. Rasmussen discloses a female connector and escutcheon plate combined therewith for telephone equipment. See Abstract. As can be seen from figure 1, the connector includes a body member (14) (i.e. *termination block base*) with a front face as illustrated in figure 1 and a rear face as illustrated in figure 2. The rear face clearly includes a plurality of screw mounting apertures (96) and mounting surfaces within each of said apertures. Notches (98) (i.e. *rear aperture*) provide rear access into the connector-receiving cavity (60) (i.e. *interior space*), which is accessible from the front face of body member (14) (i.e. *front aperture*). As can be seen from figure 3, the rear face of the body member (14) receives a plurality of screws (114) within screw receiving portions (104). Each screw (114) retains a flexible metallic spring member (16) against the rear face and within the connector-receiving cavity (60). The spring members together correspond to *a lead frame of flat metal having a plurality of separate circuit portions*. As can be seen from figure 3, each spring member (16) includes a *terminal connection portion* comprising a leg (16D) and

contact nut (110) (i.e. *screw aperture*) that are forcibly engaged with a screw (114) and a retaining nut (112); a bent tine portion (16A) and (16B); and a *trace member portion* (16C) and (16D, the portion within slot 98) that connects the bent tine and terminal connection portions. As can be seen from figure 5, each bent tine is supported in place by one of the bores (92) in the cavity (60) of the body member (14), such that they are in spaced-apart arrangement. Therefore, Rasmussen anticipates all limitations of the claim.

Claim 2 is limited to *the termination block of claim 1*, as covered by Rasmussen. As illustrated in figure 3, each screw (114) includes a *head portion*. In addition, each screw, is inherently compressed against the retaining nut (112) by screwing it into position within receiving portion (104), securing leg (16D) and nut (110), which form the terminal connection portion, in place against the rear face of body member (14). Therefore, Rasmussen anticipates all limitations of the claim.

Claim 7 is limited to *the termination block of claim 1*, as covered by Rasmussen. Figure 3 illustrates a plurality of rearward projections (108). Therefore, Rasmussen anticipates all limitations of the claim.

Claim 8 is limited to *the termination block of claim 7*, as covered by Rasmussen. The perspective front view of figure 1 depicts a raised front projection; this projection clearly will contact a portion of rearward projections (108) seen best in the perspective rear view of figure 2. Resting two of the body members (14) on top of each other (rear face-to-front face) will clearly result in their faces being spaced apart enough to prevent damage to the screws. Therefore, Rasmussen anticipates all limitations of the claim.

Claim 9 is limited to *the termination block of claim 1*, as covered by Rasmussen. Figure 3 illustrates a plurality of rearward projections (108). Also, the perspective rear view of figure 2 illustrates these projections with respect to the spring member legs (16D) (i.e. *trace member portions*) that are received in channels (98). Therefore, Rasmussen anticipates all limitations of the claim.

Claim 10 is limited to *the termination block of claim 1*, as covered by Rasmussen. The rear face shown in figure 2 includes bores (92) (i.e. *spaced apart channels*) for receiving the bent tine portion (16A) and (16B) of each spring member. Therefore, Rasmussen anticipates all limitations of the claim.

Claims 22, 23, and 28-31 recite essentially the same subject matter as claims 1, 2 and 7-10, respectively, and are anticipated by Rasmussen for at least the same reasons.

Claims 42, 46-48 and 59 recite essentially the same limitations as claims 1, 7, 9, 10 and 8, respectively, and are anticipated by Rasmussen for the same reasons.

Claims 54, 58, 60 and 61 recite essentially the same limitations as claims 42, 46, 47 and 48, respectively, and are anticipated by Rasmussen for the same reasons.

Claims 51-53 are limited to *lead frames usable with termination block bases*. The limitations of the lead frames are essentially the same as those presented in claim 1, and are anticipated by Rasmussen for the same reasons.

2. Claims 22-26, 28-35, 42-44, 46-48, 54-56 and 58-61 are rejected under 35 U.S.C. 102(b) as being anticipated by Garrett (US Patent 4,146,292).

Claim 22 is limited to *a termination block*. Garrett discloses a telephone wall mounting. See Abstract. Figure 5 depicts a front perspective of the wall mounting. In particular, the wall mounting (1) has a *front face* (13) with a female socket (5) that defines a *front aperture* and a *rear face* (17) as seen in figure 6 with a hole (14) that defines a *rear aperture*. As is plainly visible from figure 6, there exists a plurality of mounting surfaces (19). Screws extend through the entire length of the wall mounting (1), such that screws are received in openings that extend from rear to front. The socket (5) defines an *interior recess* between the *front* and *rear faces*. *Screws* (21) are inserted into the holes in the *front face*, and form terminal posts (19) at the *rear face*. Also visible from figure 6 are spade devices that encompass the terminal posts (19), these spades correspond to *a plurality of terminal connection pads*. Clearly each one has a screw aperture for receiving a screw thread. A plurality of tines (9) are inserted into the socket (33) through the *rear face* for later engagement with a male connector plug. The tines are spaced apart by way of grooves (17) within the socket (33). Furthermore, the tines are electrically connected to the spades and terminal posts by way of wires (18), which correspond to *trace members*. Therefore, Garrett anticipates all limitations of the claim.

Claim 23 is limited to *the termination block of claim 22*, as covered by Garrett. Each screw (21) depicted in figure 5 clearly has a head portion that is threaded into each hole, thus forming a termination post (19) that projects from the *rear face*. Therefore, Garrett anticipates all limitations of the claim.

Claim 24 is limited to *the termination block of claim 22*, as covered by Garrett. As can be seen from figures 5 and 6, a plug (4) containing tines (9) is inserted into the rear of jack housing (5) by way of hole (14). The solid interior of the plug includes a bore for each of the tines (9), which hold the tines in spaced apart arrangement as seen in figures 9 and 10. Therefore, Garrett anticipates all limitations of the claim.

Claim 25 is limited to *the termination block of claim 24*, as covered by Garrett. As shown in the rejection of claim 24, the jack has a bore for each tine, also see figure 10. Therefore, Garrett anticipates all limitations of the claim.

Claim 26 is limited to *the termination block of claim 25*, as covered by Garrett. Clearly seen from figure 9 is the fact that the jack spaces the tines in planar arrangement. Therefore, Garrett anticipates all limitations of the claim.

Claim 28 is limited to *the termination block of claim 22*, as covered by Garrett. Figures 6 and 7 clearly depict that the spades and termination posts (19) lie within a depression on the *rear face*. The areas of the rear surface that are not sunken correspond to *rear raised portions*. Therefore, Garrett anticipates all limitations of the claim.

Claim 29 is limited to *the termination block of claim 28*, as covered by Garrett. Much like the rear face, all connections on the *front face* are set within a depression in the *front face*. In addition, the front face includes socket (5), which further defines a *front support member*. When placed face-to-face with another like termination block/wall mount, the depressions will not meet, thus all screws will avoid damage. Therefore, Garrett anticipates all limitations of the claim.

Claim 30 is limited to *the termination block of claim 22*, as covered by Garrett. As shown in the rejection of claim 28, the depression within the rear-face houses all connections, thus, all areas that are not sunken define a *rear raised portion*. Therefore, Garrett anticipates all limitations of the claim.

Claim 31 is limited to *the termination block of claim 22*, as covered by Garrett. The rear face includes a plurality of slots (17), each engaging one of the tines (9). See figures 6 and 9. Therefore, Garrett anticipates all limitations of the claim.

Claim 32 is limited to *the termination block of claim 22*, as covered by Garrett. Figure 10 clearly depicts that the tines (9) engage the rounded surface of each slot (17), thus inherently forming a forward tension force. Therefore, Garrett anticipates all limitations of the claim.

Claim 33 is limited to *the termination block of claim 32*, as covered by Garrett. The rear face includes a plurality of slots (17), each engaging one of the tines (9). See figures 6 and 9. Therefore, Garrett anticipates all limitations of the claim.

Claim 34 is limited to *the termination block of claim 22*, as covered by Garrett. The plug (4) that houses the tines (9) is responsible for forcing the engagement of the tines (9) to the slots (17), and is thus responsible for the forwardly directed tension force created therein. Therefore, Garrett anticipates all limitations of the claim.

Claim 35 is limited to *the termination block of claim 34*, as covered by Garrett. The rear face includes a plurality of slots (17), each engaging one of the tines (9). See figures 6 and 9. Therefore, Garrett anticipates all limitations of the claim.

Claims 42-44, 46-48 and 59 recite essentially the same limitations as claims 22, 24, 25, 28, 30, 31 and 29, respectively, and are anticipated by Garrett for the same reasons.

Claims 54-56, 58, 60, 61 recite essentially the same subject matter as claims 42-44 and 46-48, respectively, and are rejected for the same reasons.

3. Claims 51 and 52 are rejected under 35 U.S.C. 102(b) as being anticipated by Denkmann et al. (US Patent 4,865,564).

Claim 51 is limited to *a lead frame usable with a termination block base*. Another exemplary wall mounted connecting block is shown in figure 4 of Denkmann. The block (420) inherently includes a front and rear face with corresponding apertures and a lead frame (450) that includes bent tines (453), terminal connection portions (451) and trace members (452). Therefore, Denkmann anticipates all limitations of the claim.

Claim 52 is limited *the lead frame of claim 51*, as covered by Denkmann. Clearly, the tines are spaced apart when inserted into interior recess defined by socket (430). Therefore, Denkmann anticipates all limitations of the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 15, 36 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rasmussen (US Patent 4,040,699).

Claim 15 is limited to *the termination block of claim 1*, as covered by Rasmussen. Rasmussen simply does not disclose the compositionally substance or material makeup of each conductor (16). Therefore, Rasmussen makes obvious all limitations of the claim with the exception wherein *the contact end portion of each of the bent tine portions...has a flat forward facing contact surface with a coating of conductive metal thereon and the other portions of the contact end portion are uncoated.*

The examiner takes Official Notice of the fact that coating of a contact with a highly conductive material was well known at the time of the art. Often times, connectors are covered in gold or other material to provide a less resistive connection between two adjoining electrical elements.

It would have been obvious to one of ordinary skill in the art to provide a conductive coating on the forward facing ends as was known in the prior art in order to provide a low resistive coupling between the male plug (10) and bent tines (16A) and (16B) of Rasmussen.

Claim 36 recites essentially the same subject matter as claim 15, and is unpatentable over Rasmussen for at least the same reasons.

Claim 62 recites essentially the same subject matter as claims 15 and 36, and is unpatentable over Rasmussen for the same reasons.

5. Claims 16, 17, 37, 38, 49, 50, 63 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rasmussen (US Patent 4,040,699) in view of Drake (US Patent 3,675,183).

Claim 16 is limited to *the termination block of claim 1*, as covered by Rasmussen. The device disclosed by Rasmussen includes termination points for a plurality of electrical conductor cables (120) as seen in figure 4. However, these conductors exhibit a downward pull on the termination points, and can wear out the contact point over time. In addition, sudden displacement of the conductors can cause damage to the contact points and possibly the conductors themselves. Therefore, Rasmussen anticipates all limitations of the claims with the exception wherein the *termination block is arranged for carrying a mounting screw.*

In view of the above well-known problems with cable termination blocks, it would have been advantageous to provide cable strain relief to each conductor cable (120). Drake discloses such an arrangement, where a cable (60) is supported in a cradle (62) mounted on the rear face of a connection block. This arrangement prevents displacement of the cable from disturbing the fragile contacts made at joints (40), (42), (44), (46) and (48). It would have been obvious to one of ordinary skill in the art at the time of the invention to include cable strain relief for each conductor associated with a termination block as taught by Drake for the purpose of preventing damage to the contact joints.

It follows from the above modification that mounting screws of appropriate size are inherently capable of being retained within the cable strain relief cradles taught by

Drake. Therefore, Rasmussen in view of Drake makes obvious all limitations of the claim.

Claim 17 is limited to *the termination block of claim 16*, as covered by Rasmussen. As shown in the rejection of claim 17, cable strain relief cradles (62) are used to hold a cable when not used for retaining mounting screws. Therefore, Rasmussen in view of Drake makes obvious all limitations of the claim.

Claims 37 and 38 recite essentially the same subject matter as claims 16 and 17, respectively, and are unpatentable over Rasmussen in view of Drake for the same reasons.

Claims 49 and 50 recite essentially the same subject matter as claims 16/37 and 17/38, respectively, and are unpatentable over Rasmussen in view of Drake for the same reasons.

Claims 63 and 64 recite essentially the same subject matter as claims 49 and 50, respectively, and are unpatentable over Rasmussen in view of Drake for at least the same reasons.

6. Claims 36 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garrett (US Patent 4,146,292).

Claim 36 is limited to *the termination block of claim 22*, as covered by Garrett. Garrett simply does not disclose the compositionally substance or material makeup of each conductor (19). Therefore, Garrett makes obvious all limitations of the claim with the exception wherein *the contact end portion of each of the bent tine portions...has a*

flat forward facing contact surface with a coating of conductive metal thereon and the other portions of the contact end portion are uncoated.

The examiner takes Official Notice of the fact that coating of a contact with a highly conductive material was well known at the time of the art. Often times, connectors are covered in gold or other material to provide a less resistive connection between two adjoining electrical elements.

It would have been obvious to one of ordinary skill in the art to provide a conductive coating on the forward facing ends as was known in the prior art in order to provide a low resistive coupling between the male plug (not shown) and bent tines (19) of Garrett.

Claim 62 recites essentially the same subject matter as claim 36, and is unpatentable over Garrett for the same reasons.

Allowable Subject Matter

The following is a statement of reasons for the indication of allowable subject matter:

7. **Claims 3-6, 11-14, 18-21, 27, 39-41, 45 and 57 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.**

Claim 3 is limited to *the termination block of claim 1*, as covered by Rasmussen. As can be seen from figures 1-8 of Rasmussen there simply is no plug to be inserted in the rear face. The spring members (16) are provided protection by way of channels (98) and bores (92); there is no reason for a plug. Therefore, Rasmussen anticipates all

limitations of the claim with the exception of *a plug extending through the rear aperture of the rear face of the termination block base*. Thus, claim 3 is allowable over Rasmussen.

Claims 4-6 are dependent on claim 3, and are allowable over Rasmussen for at least the same reasons.

Claim 11 is limited to *the termination block of claim 1*, as covered by Rasmussen. As seen in figure 4, the only tension applied to the bent leg portions (16A) and (16B) of the spring members (16) is from the male connector (10) when it is inserted into the female socket (60). Therefore, Rasmussen anticipates all limitations of the claim with the exception wherein the bent tine portions...springably engage a portion of the rear face of the termination block base to generate a forwardly directed tension force. Thus, claim 11 is allowable over Rasmussen.

Claim 12 is dependent on claim 11, and is allowable over Rasmussen for at least the same reasons.

Claim 13 is limited to *the termination block of claim 1*, as covered by Rasmussen. While Rasmussen discloses a plug inserted through the front aperture (60) of the body member (14), there is simply no rear plug. Therefore, Rasmussen anticipates all limitations of the claim with the exception of *a plug extending through the rear aperture of the rear face of the termination block base*. Thus, claim 13 is allowable over Rasmussen.

Claim 14 is dependent on claim 13, and is allowable over Rasmussen for at least the same reasons.

Claim 18 is limited to *the termination block of claim 1*, as covered by Rasmussen. While it was shown in the rejection of claim 16 that it would have been obvious to include a strain relief cradle (16) for a cable associated with a termination block, there is no need for a second, as only one cable is associated with the block disclosed by Rasmussen. Therefore, Rasmussen in view of Drake makes obvious all limitations of the claim with the exception of *first and second screw retainers*. Thus, claim 18 is allowable over Rasmussen in view of Drake.

Claims 19-21 are dependent on claim 18, and are allowable over Rasmussen in view of Drake for at least the same reasons.

Claims 39-41 recite essentially the same subject matter as claim 18, and are allowable over Rasmussen in view of Drake for at least the same reasons.

Claim 27 is limited to *the termination block of claim 24*, as covered by Garrett. While the plug (4) envelops at least a portion of the conductor wire (18) as seen in figure 10, it does not include a cover that extends over a portion of *rear face* since it simply fits in place within hole (14). Therefore, Garrett anticipates all limitations of the claim with the exception wherein the plug has a cover portion extending over a portion of the rear face. Thus, claim 27 is allowable over Garrett.

Claims 45 and 57 recite essentially the same subject matter as claim 27, and are allowable over Garrett for at least the same reasons.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter F. Briney III whose telephone number is 571-272-7513. The examiner can normally be reached on M-F 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SINH TRAN
SUPERVISORY PATENT EXAMINER

WFB
5/23/05